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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/752,282

12/29/2000

Schuster Karl-Heinz

001406

9180

7590

11/21/2002

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EXAMINER

NGUYEN, HUNG

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 11/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/752,282

Applicant(s)

KARL-HEINZ ET AL.

Examiner

Hung Henry V Nguyen

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Prosecution Status*

1. This office action is Non-final since the Examiner has changed the rejections and advanced new arguments.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Tokuda et al (U.S.Pat. 5,995,263).

With respect to claims 1, 3, and 12-14, Tokuda et al discloses an exposure apparatus having an optical arrangement (see fig.1) comprising all of the limitations of the instant claim including: a projection optical system (14); a light source (1L) for emitting radiation; a gas supply apparatus (32A, 32Aa, 32B, 32Bb) having at least one gas directing device (32A,32B) which is positioned relative to optical lens (15) and the temperature of gas and the flow rate of the supplied gas are measured and controlled so that the flow rate of the gas has a magnitude and spatial distribution (clearly illustrated as arrows in fig.1) which are adjusted in accordance with the intensity distribution of the light source (see col.7, lines 3-41 and figs.1, 3).

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2, 4-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tokuka et al (U.S.Pat. 5,995,263) 5,920,377) in view of Komoriya et al (U.S.Pat. 5,025,284).

3. With regard to claims 2 and 4, 8-11, Tokuka discloses substantially all of the basic features of the instant claims including controlling the flow rate of the gas for cooling the optical lens (15) as discussed. Tokuda does not expressly disclose "throttle valves". Komoriya et al teaches throttle valves (36,37) placed in the gas supply line for controlling the gas flow rate. It would have been obvious to a skilled artisan to utilize the throttle valves as taught by Komoriya into the device of Tokuda for controlling the gas flow rates.

As to claims 5-7, although the prior arts do not specifically disclose the claimed adjustable holding device to hold the nozzle, the holding device is seen to be inherent teaching of that device since a means for holding the nozzle must be present for the nozzle to function as intended. In addition, it would have been obvious to a skilled artisan that the nozzle should be made adjustable relative to the optical element whereby any selected regions on the surface of the lens can be cooled off via the nozzle. Also, it has been held that provision of adjustability, where needed, involves only routine skill in the art. *In re Stevens*, 101 USPQ 284 (CCPA 1954).

***Response to Amendment***

4. Applicant's amendment filed September 13, 2002 have been entered. Claims 1, 12 have been amended. New claim 14 has been added. In light of Applicant's remarks, and upon reference to the identified passage in the specification, the objection to the drawings is withdrawn. Applicant's amendments and remarks are sufficient in overcoming the rejection of claims 1-13 under 35 U.S.C. 112, second paragraph.

Turning now to the prior art rejection, applicant's arguments have been carefully considered but they are not found to be persuasive. Before commenting on applicant's arguments, the applicant is reminded that the claimed subject matter to examination will be given their broadest reasonable interpretation consistent with the specification, and limitations appearing in the specification are not be read into the claims. In re Yamamoto, 740 F. 2d 1569, 1571, 222 USPO 934, 936 (Fed.Cir. 1984).

With this in mind, the discussion herein will focus on how the terms and relationships thereof in the claims are met by the references. Response to any limitation that is not in the claims or any argument that is irrelevant to or does not relate to any specific claimed language will not be warranted.

With respect to claims 1, 3, 12-14, the Examiner maintains that Tokuda et al (U.S.Pat. 5,995,263) does disclose all of the structures as claimed. In reponse to applicant's argument that Tokuda'263 includes a single temperature measurment device and Tokuda'263 fails to recognize local differences in lens temperature across the surface of the lens and thus fails to show a device that can adapt the magnitude and the spatial distribution of the exiting gas as claimed; the Examiner respectfully disagrees with the Applicant because this argument is inappropriate.

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Firstly, the limitation of “recognize local differences in lens temperature across the surface of the lens” is not stated in the claims. It is the claims that define the claimed invention, and it is claims, not specifications that are anticipated or unpatentable. *Constan v. Advanced Micro-Devices Inc*, 7 USPQ2d 1064. Secondly, Tokuda does include at least two temperature measuring devices such as 30A and 30B (see fig.1) and finally, Tokuda meets the limitations of “a device in which the gas directing device is controllable so that the volumetric flow of the existing gas has a magnitude and spatial distribution that are adapted to the intensity distribution of the radiation” as claimed. The applicant is directed to column 7, lines 31-42 of Tokuda. Therein it is clearly disclosed that “the control portion of the image forming property correction system (31) controls the flow rate of gas that is blown onto the surface of the lens 15 from the air blowing units 32 A and 32 B through the respective air outlets 32Aa and 32Ba so as to keep the temperature of the lens 15 measured by the thermistors 30A and 30B with a predetermined temperature range. Therefore, even when exposing for a long time, exposure energy from the illuminating light is not accumulated”. In other words, one having ordinary skill in the art would understand that if the intensity distribution of the radiation is increased, the temperature of the lens 15 is increased (detected by thermistors 30A and 30B); the flow rate of gas/volumetric flow of the gas is adjusted accordingly to keep the temperature of the lens 15 at a desired level.

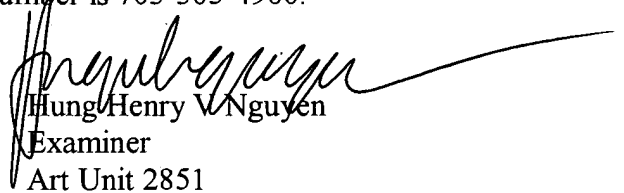
With respect to claims 2, 4-11, applicant's arguments have been carefully reviewed but have been traversed as set forth above.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Henry V Nguyen whose telephone number is 703-305-6462. The examiner can normally be reached on Monday-Friday (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on 703-308-2847.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4900.

  
Hung Henry V Nguyen  
Examiner  
Art Unit 2851